FieldServer Protocol Driver Sheet
Secutron Modul-R

1   DESCRIPTION

The Secutron Modul-R driver allows the FieldServer to transfer data to and from a Client and a Server panel on a single point to point network over RS-232 using Secutron Modul-R protocol.

The protocol is strictly command/response with the Client polling a Server device. A Server device can report the generation and clearing of alarms to the polling Client. One panel can be connected per FieldServer port. The driver supports networked panels. The Client Drive supports up to 1000 networked panels per port, but the Server driver only supports 10 panels due to memory limitations. A Server panel can consist of up to 100 circuits.

When an alarm is generated, a bit is set and when the alarm is cleared, the bit is cleared. The panel number is identified by the Node_ID in the configuration file.

Each circuit's alarms are represented by 32 unsigned quantities, which hold 1,024 bits. Only bits 0 to 999 may be used. The last 25 bits are reserved.

There are 3200 unsigned quantities per panel to represent the 100 circuits with 1000 devices per circuit. Each bit of the 32-bits in an unsigned quantity represents an alarm state (1 = alarm, 0 = normal).

A set bit indicates an alarm and the clearing of a bit indicates the reset of an alarm. A panel number is identified by the Node ID in the configuration files.

Panel, circuit and device numbers range from 0 in messages, such as:
Panel numbers – 0 to 999
Circuit numbers – 0 to 99
Device numbers – 0 to 999

The Client driver is configured with three Map Descriptors. Each Map Descriptor must be of a certain "Secutron_Type". The following types and their functions are defined:

Secutron_type	Map Descriptor Function
Poller	Polls the Secutron Modul-R at the configured scan interval.
Device	Stores alarm (Device) statuses.

Secutron_type	Map Descriptor Function
Function	Stores the function or type of alarm that was triggered or restored.

The Server driver emulates a Secutron Modul-R panel and is configured using two Map Descriptors:

Secutron_type	Map Descriptor Function
Device	Stores alarm (Device) statuses.
Function	Stores the function or type of alarm that was triggered or restored.

The Server driver will respond with alarm statuses from the Device Map Descriptor. The Function Map Descriptor will return the type or function of the corresponding alarm reported by the Device Map Descriptor.

1.1   Connection Facts

FieldServer Mode	Nodes	Comments
Client	Up to 1000 per port	Only one panel can be connected per port, but the driver supports up to 1000 networked panels.
Server	10	Max of 10 panels supported due to memory limitations.

2   FORMAL DRIVER TYPE

Serial

Client & Server

3   COMPATIBILITY MATRIX

FieldServer Model	Compatible
FS-B35 Series	Yes
ProtoNode/ProtoAir	Yes
QuickServer FS-QS-10xx	No
QuickServer FS-QS-12xx	Yes
QuickServer FS-QS-20xx	Yes
QuickServer FS-QS-22xx	Yes

4   CONNECTION INFORMATION

Connection Type:	RS-232
Baud Rates:	150, 300, 1200, 2400, 4800, 9600 (Vendor limitation)
Data Bits:	8 (Vendor limitation)
Stop Bits:	1 (Vendor limitation)
Parity:	None (Vendor limitation)
Multidrop Capability:	No

5   DEVICES TESTED

Device	Tested (FACTORY, SITE)
Secutron Modul-R	SITE

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